

DMITRIYEVA. A.A., kand.med.nauk; GRINBERG, E.M.

Angioid streaks of the retina. Trudy 1-go MMI 32:201-207 '64.
(MIRA 18:5)

GRINBERG, E.M.

Morphological substantiation of functional changes in the eye
under the influence of diathermy and ultrahigh-frequency currents.
Trudy 1-go MMI 32:132-146 '64. (MIRA 18:5)

TIBURSKAYA, N.A.; GLADKIKH, V.F.; GRINBERG, E.M.

Data on the organ of vision following administration of quinocide.
Med.paraz. i paraz.bol. 28 no.4:454-456 J1-Ag '59. (MIRA 12:12)

1. Iz sektora eksperimental'noy parazitologii Instituta malyarii, meditsinskoy parazitologii i gel'mintologii Ministerstva zdravookhraneniya SSSR (dir. instituta - prof. P.G. Sergiyev, zav. sektorom - prof. V.P. Pod'yapol'skaya) i kafedry glaznykh bolezney 1-go Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M. Sechenova (zav. kafedroy - prof. V.N. Arkhangel'skiy).
(ANTIMALARIALS pharmacology)
(QUINOLINES pharmacology)
(EYE pharmacology)

ZAKIS, Martin Petrovich : GRINBERG, E., red.; LEVI, S., red.; BOKMAN, R.,
tekhn. red.

[Technological progress of the radio equipment industry in Soviet
Latvia] Tekhnicheskii progress v radiopromyshlennosti Sovetskoi
Latvii. Riga, Izd-vo Akad. nauk Latviiskoi SSR, 1957. 121 p.
(MIRA 15:2)

(Latvia--Radio industry)

GRINBERG, D.; GORDIYENKO, V. [Hordiienko, V.]

Powerful production base of interfarm construction enterprises.
Sil'.bud. 13 no.11:16-18 N '63. (MIRA 17:1)

1. Direktor Kamenets-Podol'skogo mezhkolkhoznogo kombinata
stroitel'nykh materialov Khmel'nitskoy oblasti (for Grinberg).
2. Glavnyy inzh. Kamenets-Podol'skogo mezhkolkhoznogo kombinata
stroitel'nykh materialov Khmel'nitskoy oblasti (for Gordiyenko).

GRINBERG, D.Ye.; Primeneniye uchastiya SERGEYEV, M.A., inzh.;
VASIL'YEVA, V.P., red. izd.-va; BARDINA, A.A., tekhn.
red.

[Lay-out man in machine shops] Razmetchik mekhanicheskikh
tsekhov. Izd. 2., perer. i dop. Moskva, Mashgiz, 1963. 342 p.
(MIRA 17:2)

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SOV/1522

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and edited by Engineer M.A. Sergeyev. Chapters VIII, XIII, and XIV and paragraphs 48, 50, and 56 of Chapter X, and paragraphs 60 and 61 of chapter XII, were written by M.A. Sergeyev. There are no references.

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concerning layout work and its place and function in the modern machine-building industry, layout tools and methods most often used and information on spoilage occurring during layout work and its prevention. Chapter II deals with problems concerning blanks for laying out parts. Special attention is given to the process of cutting out parts from blanks and its interconnection with the selection of a datum in laying out and the position for setting up parts on a layout block. Chapter III is devoted to designs of layout plates and methods of their inspection. Necessary information on the arrangement of the working place and safety of layout personnel is presented in Chapter IV. Chapters V, VI, and VII cover in detail all problems connected with plane layout practice. Techniques of using measuring tools, tools for scribing and prick-punch marking of layout lines, and the description of some special layout tools and devices are presented in Chapter V. Procedure and types of work connected with preparing of parts for layout are presented in Chapter VI. The most widely used methods of plane layout are discussed in detail in Chapter VII. Analogous problems concerning the three-dimensional layout of large parts are presented in Chapters VIII, IX, and X. Special features of laying out large parts are discussed in Chapter XI, and tools and procedure for precession layout in Chapter XII. Chapter XIII discusses the structure and development of manufacturing processes and the establishment of standards for layout work. The last chapter is devoted to the organization of the labor force in machine-building plants, cost accounting and production costs. Chapter V was prepared by D.Ye Grinberg

Carã 2/8

25(1)

PHASE I BOOK EXPLOITATION

SOV/1522

Grinberg, David Yefimovich (Deceased)

Razmetchik mekhanicheskikh tsekhov (Machine Shop Layout Man)
Mashgiz, 1958. 315 p. 16,000 copies printed.

Reviewers: N.N. Kropivnitskiy, Engineer, and S.N. Maren'yanichev, Engineer;
Ed.: A.N. Ogloblin, Docent; Ed. of Publishing House: V.P. Vasil'yeva;
Tech. Ed.: R.G. Pol'skaya; Managing Ed. for Literature on the Design and
Operation of Machinery (Leningrad Division, Mashgiz); F.I. Fetisov, Engineer.

PURPOSE: This is a textbook for students of technical schools and it may also be
used by machine part layout personnel studying to improve their qualifications.

COVERAGE: The book discusses all the most important problems concerning the layout
of machine parts. It was written in accordance with the program of study of the
course on layout work given at technical schools for machine shop layout personnel.
Chapter I presents basic information on layout work and its purpose. It is written
in such a way that it gives the student necessary introduction to basic problems

Card 1/8

GRINBERG, D. S.

Category: USSR / Farm Animal Diseases Caused by Helminths.

4-4

Abs Jour: Refer. Zhur-Biologiya, No 16, 1957, 72323

Author : Grinberg D. S., Ivanova, P.S.

Inst : Not given

Title : The Dehelminthization Experiments in Dogs with Ascaridosis

Orig Pub: Sb. Nauchn. Tr. Ivanovsk. S-Kh. Ia-ta, 1956, Vyp. 13, 170-172

Abstract: In dogs, invaded by *Toxocara canis* and *Toxascaris leonina*, the antihelminthic properties of CCl_4 (I) and santonine (II) were tested. I was administered in 0.1 - 0.2 g/kg doses, and II in 0.01 - 0.02 g/kg doses, followed by purgative. The effectiveness of I- was 80 percent; II gave a considerably lower effect in dehelminthization.

Card : 1/1

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GRINBERG, D. N.

See: SALUNSKAYA, N. I., GONOLAKO, N. I., VITAS, K. I., and GRINBERG, D. N.

GRINBERG, D. N. "Study of Rhizoctonia on Sugar Beets," in Principal Conclusions of the Scientific-Research Work of the All Union Scientific-Research Institute for the Sugar Industry for 1937, State Technological-Economical Publishing House of Food Industry, Moscow, 1939, pp. 260-262. 61.9 V96

So: Sira - 31 - 90 - 53, 15 December 1953

31735

Apparatus for measuring the moisture...

S/081/61/000/021/062/094
B138/B101

cylindrical plastic container with an inside diameter of 65 mm and depth of 27 mm. It has two aluminium electrodes in the shape of rectangular plates 27 mm in length and 10 mm wide. The test substance, in powder form, is placed in the transmitting unit, resistivity is measured, and the moisture content is found from the calibrating curve. With the appropriate calibration, the instrument can be used to measure the moisture content of various different substances which have high electrical conductivity, e.g. mineral salts and fertilisers. [Abstracter's note: Complete translation.]

Card 2/2

X

31735

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11.71.40

AUTHORS:

Grinberg, D. M., Leontovich, L. V., Ruchkin, V. M.,
Shishkin, A. F.

TITLE:

Apparatus for measuring the moisture content of ammonium
nitrate explosives

PERIODICAL:

Referativnyy zhurnal. Khimiya, no. 21, 1961, 391, abstract
214446 (Bezopasnost' truda v prom-sti, no. 4, 1961,
23 - 24)

TEXT: The article describes a portable electrical instrument ПЭВ (PEV) designed for the rapid measurement of the moisture content of ammonium nitrate explosives and of ammonium nitrate. The instrument measures the electrical resistivity of samples of the substance. This value is a function of humidity. To calibrate the PEV, the resistivity of several samples is measured, and at the same time their moisture content is determined by the oven-drying method. The PEV consists of an electric circuit for measuring resistance, and a transmitting unit which is a

Card 1/2

X

New Developments in Blasting Means (Cont.)

SOV/6098

Э30Ш-5 electric igniter; Э3П-5 electric igniter cartridge; Э3Т-2 capped electric fuse; ДШП-1 and ДШП-2 safety detonating fuses; ДШТ-165 heat-resistant detonating fuse; ДШУ reinforced detonating fuse; К3ШП-58 pyrotechnic detonating relay.

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GRINBERG, D. M.

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Assonov, V. A., and L. A. Paporotskiy, Resp. Eds.

Novoye v sredstvakh i sposobakh vzryvaniya (New Developments in Blasting Means and Methods). Moscow, Gosgortekhnizdat, 1962. 124 p. (Series: Vzryvnoye delo; Sbornik no. 48/5) Errata slip inserted. 3000 copies printed.

Sponsoring Agency: Nauchno-tehnicheskoye gornoye obshchestvo.

Ed. of Publishing House: A. Ya. Koston'yan; Tech. Eds.: L. I. Minsker and G. M. Il'inskaya.

PURPOSE: The book is intended for mining engineers, workers in scientific research and planning organizations, and also for teachers and students of mining and technical schools.

COVERAGE: This collection of articles describes new blasting means and methods, means of protecting electric detonators from stray currents, and improved methods of short-delay detonation.

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GRINBERG, D.M.

Conditions for dependable blasting with Czechoslovak DEM electric
detonators. Vzryv. delo no.48/5:23-27 '62. (MIRA 15:9)

1. Proizvodstvenno-eksperimental'noye upravleniye tresta
Soyuzvzryvprom.

(Czechoslovakia--Detonators--Testing)

GRINBERG, D.M., inzh.; LEONTOVICH, L.V., inzh.; RUCHKIN, V.M., inzh.;
SHISHKIN, A.F., inzh.

Device for measuring the humidity of ammonium nitrate explosives.
Dokop.truda v prom. 5 no.4:23-24 Ap '61. (MIRA 14:3)

I. Test Soyuzvzryvrom.
(Explosives--Testing)

BEHZAKOVENJY, M.A.; GRINBERG, L.I., GUTNIK, M.S.

Designing continuous plating unit. Metallurg 9 no.12:30-31
D '67. (MIRA 18-3)

1. Cherepovetskiy metallurgicheskiy zavod.

GRINBERG, D.L.; OKULOV, V.S.

Combined protection of the primary gas coolers from corrosion.
Koks i khim. no.8:48-49 '62. (MIRA 17:2)

1. Cherepovetskiy metallurgicheskiy zavod.

TREKALO, S.K.; YAKURTSINER, N.M.; AMDRONOV, V.N.; GRIGOR'YEVYKH, G.F.;
KAYLOV, V.D.; SHUR, A.B.; v rabote prinimali uchastiye:
NEVMERZHITSKIY, Ye.V.; SHOLENINOV, V.M.; VITOVSKIY, V.M.;
GRINBERG, D.L.; GUTMAN, E.Ye.; YEGOROV, N.D.

Open-hearth furnace operations with classified sinter. Stal'
20 no. 12:1063-1070 D '60. (MIRA 13:12)

1. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy
metallurgii i Cherepovetskiy metallurgicheskiy zavod.
(Blast furnaces) (Sintering)

GUROVICH, Arnel'd Naumovich, Prinsipali uchastiye: G. JINBERG, inzh.; NEMKOVSKIY, A.E., inzh.; MALOMEDOV, A.M., inzh.; retsenzent; GAL'PERIN, S.I., nauchn. red. [deceased]; KUSKOVA, A.I., red.

[Ship equipment and the internal outfitting of ships] Sudovye ustroistva i vnutrennee oborudovanie sudov. Leningrad, Sudostroenie, 1964. 297 p. (MIRA 17:9)

GRINBERG, B.Ya.

Stand for balancing flywheels. Mashinostroitel' no.7:37 JI '62.
(MIRA 15:7)
(Balancing of machinery—Equipment and supplies)

GRINBERG, B.Ya.

Press for pressing-on the pulleys. Mashinostroitel' no.5:39
My '62. (MIRA 15:5)
(Power presses)

GRINBERG, B.Ya.

Stand for lapping spherical surfaces. Mashinostroitel' no.2:28
F '62. (MIRA 15:2)
(Grinding and polishing)

608-111-22, 1, 2.

Reimbursement of the following amounts for the period 1/1/60
and ending 12/31/60, for the purpose of the 1960
prog. no. 1512-12 160. (1960 1512)

1. Belorusskiy polit-ekonomicheskiy universitet.

GRINBERG, A.V.

Concerning the article "Short for testing electrical motors."
Prom. energ. 19 no.5/59 My '64. (MIRA 17:6)

GRINBERG, B.V., inzh.

Stand for testing electric motors. Prom. energ. 18 no.10:
28-30 0 '63. (MIRA 16:10)

GRINBERG, B.V.

Characteristics of commutator-type "Shrage" electric motor driving
ring spinning frames. Prom.energ. 16 no.5:31-34 My '61.

(MIRA 14:7)

(Electric motors) (Spinning machinery--Electric driving)

GRINBERG, B.V.

Adjustment and operation of automatic regulators of thread tension.
Tekst. prom. 19 no.11:31-35 N '59. (MIRA 13:2)

1. Glavnyy energetik Minskogo kamvol'nogo kombinata.
(Spinning machinery)

GRINBERG, B. V.

FEYERMARK, M.M., inzhener; YERMAKOV, A.S.; STOLYAREVSKIY, N.A., inzhener;
GOL'DENBLAT, B.I., inzhener; GURGENIDZE, D.P., inzhener; KOZLOV, A.P.,
tekhnik; GORBACHEV, N.I., tekhnik; GRINBERG, B.V., inzhener.

Protection of substation power transformers in industrial plants.
Prom.energ. 12 no.10:29-33 O '57. (MIRA 10:10)

1. Khar'kovskoye otdeleniye Gosudarstvennogo Proyektного Instituta Tyazhpromelektroproyekt (for Feyermark).
2. Sverdlovskiy podshipnikovyy zavod (for Yermakov).
3. Proyektnyy institut, Odessa (for Gol'denblat).
4. Ust'-Kamenogorskiy svintsovo-tsinkovyy kombinat (for Stolyarevskiy).
5. Tbilisskiy pryadil'no-trikotazhnyy kombinat (for Gurgeniidze).
6. Kamvol'nyy kombinat, Minsk (for Grinberg).
(Electric transformers)

KAVETSKIY, N.Ye., zasluzhennyy detatel' nauki, prof. GRINBERG, B.M.,
dotsent (Kuybyshev)

Dispensary services for persons under a doctor's care. Klin.
med. 40 no.11:39-44 N'62 (MIRA 16:12)

1. Glavnyy terapevt Kuybyshevskoy oblasti (for Grinberg).

KLIMOVITSKIY, V.A., prof.; GRINBERG, B.M., dotsent (Kuybyshev)

Sample methodical plan for organizing dispensary services for
patients suffering from the basic internal diseases. Zdrav.Ros.
Feder. 2 no.1:15-20 Ja '58. (MIRA 11:2)
(VISCERA--DISEASES)

GRINBERG, B.M.

Grinberg, B.M. "Rheumatism, based on material collected by evacuation hospitals", Trudy Kuybyshevsk. gos. med. in-ta, V.1. 11, 1948, p. 23-27.

SO: U-3042, 11 March 53, (Letopis 'nykh Statey, No. 9, 1949)

GRINBERG, B.I.; MAL'YAN, Ye.P.

General automatic and dispatcher control of plant boilers
operating on gas fuel. Melt. khoz. 42 no.4:51-56 Ap '63.
(MIRA 17:10)

KERBALIYEV, A.I., inzh.; GRINBERG, B.I., inzh.; SAAKOV, Yu.M., inzh.

Automation and central control in plants manufacturing precast
reinforced concrete. Mekh. stroi. 18 no.10:24-27 O '61. (MIRA 14:11)
(Concrete plants) (Automatic control)

BRATIN, David Anisimovich, RYB'YEV, I.M., prof., doktor tekhn. nauk,
ratsenent, KUBBERG, B.G., prof., ratsenent, KOROVNIKOV,
B.D., dots. kand. tekhn. nauk, ratsenent, AVERKITEV, V.I.,
dots. kand. tekhn. nauk, ratsenent, BOCHAROVA, E.F., red.

[New materials in engineering] Nya: materialy v tekhnika.
Moskva, Vysshaya shkola, 1966. 192 p. (MIRA 18.10)

GRINBERG, Boris Grigor'yevich; ZHADAN, Vasilii Timofeyevich;
MIKHALEVSKAYA, V.I., red.

[Technology of metals and welding; program, methodological
guide and control assignments for students of structural
engineering in correspondence schools of higher education]
Tekhnologiya metallov i svarka; programma, metodicheskie
ukazaniia i kontrol'nye zadaniia dlia studentov inzhenerno-
stroitel'nykh spetsial'nostei zaochnykh vysshikh uchebnykh
zavedenii, fakul'tetov, otdelenii. Moskva, Vysshiaia shkola,
1964. 81 p.
(MIRA 17:9)

1. Russia (1923- U.S.S.R.) Ministerstvo vysshego i srednego
spetsial'nogo obrazovaniia. Uchebno-metodicheskoye upravle-
niye po vuzam.

GRINBERG, B.G.; IVASHCHENKO, T.M.; FUFAYEVA, G.I., red.; EGGERT,
A.P., tekhn. red.; BARANOV, Yu.V., tekhn. red.

[Metallography and the heat treatment of metals; guide to
laboratory work] Metallovedenie i termicheskaya obrabotka;
rukovodstvo k laboratornym zaniatiyam. Moskva, Gosvuzizdat,
1963. 179 p. (MIRA 16:6)
(Metallography) (Metals--Heat treatment)

POLUKHIN, P.I., prof., doktor tekhn.nauk, red.; GRINBERG, B.G., dotsent, kand.tekhn.nauk; KANTENIK, S.K., dotsent, kand.tekhn.nauk; ZHADAN, V.T., dotsent, kand.tekhn.nauk; VASIL'YEV, D.I., dotsent, kand.tekhn.nauk; LEBEDEV, B.G., dotsent, kand.tekhn.nauk, nauchnyy red.; LAKHTIN, Yu.M., prof., doktor tekhn.nauk, retsenzent; KITAYTSEV, V.A., dotsent, kand.tekhn.nauk, retsenzent; RAZYGRAYEV, A.M., inzh., retsenzent; YUDINA, L.A., red.izd-va; RYAZANOV, P.Ye., tekhn.red.

[Technology of metals] Tekhnologiya metallov. Pod obshchei red. P.I.Polukhina. Moskva, Gos.izd-vo lit-ry po stroit., arkhitekt. i stroit.materialam, 1960. 460 p. (MIRA 14:3)

1. Kafedra metallovedeniya Moskovskogo avtomobil'no-dorozhnogo instituta (for Lakhtin, Kitaytsev, Razygrayev).
(Metals) (Metalwork)

Ferrous Metallurgy (Cont.)

SOV/3581

Iron-Ore Industry

4

New Developments in Cast-Iron Production Technique

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Progress in Rolling Mill Production

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GRINBERG, B. G.

PHASE I BOOK EXPI

SOV/3581

Polukhin, Petr Ivanovich, Doctor of Technical Sciences, and Boris Grigor'yevich Grinberg, Candidate of Technical Sciences

Chernaya metallurgiya v semiletii (Ferrous Metallurgy in the Seven-Year Plan) Moscow, Izd-vo "Znaniye," 1960. 32 p. (Series: Vsesoyuznoye obshchestvo po rasprostraneniyu politicheskikh i nauchnykh znaniy. Ser. 4, No. 2, Nauka i tekhnika) 40,000 copies printed.

Ed.: T.F. Islankina; Tech. Ed.: Ye.V. Savchenko.

PURPOSE: This booklet is intended to acquaint the reader with the progress to be made in the field of ferrous metallurgy during the current Seven-Year Plan.

COVERAGE: The booklet describes plans for development in iron-ore treatment and iron, steel, and rolling-mill production. No personalities are mentioned. There are 16 references, all Soviet.

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Metals Engineering Handbook in Five (Cont.)

SOV/1439

having contributed to this field. There are 137 references of which 121 are Soviet, 13 English, 1 German, 1 Italian and 1 Polish.

TABLE OF CONTENTS:

CAST IRON, STEEL AND SINTERED CARBIDES

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GRINBERG, B G

25(1)

PHASE I BOOK EXPLOITATION

SOV/1439

Spravochnik metallista v pyati tomakh, t. 3, kn. 1 (Metals Engineering Handbook in Five Volumes, Vol. 3, bk. 1) Moscow, Mashgiz, 1958.
560 p. 50,000 copies printed.

Ed. (Title page): V.S. Vladislavlev, Professor (Deceased); Ed. (Inside book):
V.I. Krylov, Engineer; Tech. Ed.: T.F. Sokolova; Editorial Board:
N.S. Acherkhan (Chairman and Chief Ed.), Doctor of Technical Sciences,
Professor, V.S. Vladislavlev, Professor (Deceased), A.N. Malov, Candidate of
Technical Sciences, S.N. Pozdnyakov, A.Ya. Rostovyykh, G.B. Stolbin, and
S.A. Chernavskiy; Managing Ed. for Reference Literature: V.I. Krylov,
Engineer.

PURPOSE: The book is a reference book for technicians and engineers working in the
field of machinery design and in production.

COVERAGE: The book covers the following: engineering specifications, treatment
and use of cast iron, steel and carbides, heat treatment of steel and cast
iron, specifications, treatment and use of nonferrous metals and nonmetallic
materials. I.Z. Yasnogorskiy, V.P. Vologdin, N.V. Geveling are mentioned as

Card 1/14

ANDREYEV, A.V. (continued) Card 4.

[Concise polytechnical dictionary] Kratkii politekhnicheskii slovar'. Redaktsionnyi sovet; IU.A.Stepanov i dr. Moskva, Gos. izd-vo tekhniko-teoret. lit-ry, 1955. 1136 p. (MLRA 8:12)

1. Chlen-korrespondent AN SSSR (for Plaksin)
(Technology--Dictionaries)

ANDREYEV, A.V., (continued) Card 3.

TRET'YAKOV, A.P., retsenzent, redaktor; FAYERMAN, Ye.M., retsenzent, redaktor; KHACHATYROV, T.S., retsenzent, redaktor; CHERNOV, H.V., retsenzent, redaktor; SHMERGIN, A.P., retsenzent, redaktor; SHESTOPAL, V.M., retsenzent, redaktor; SHESHKO, Ye.F., retsenzent, redaktor; SHCHAPOV, N.M., retsenzent, redaktor; YAKOBSON, M.O., retsenzent, redaktor; STEPANOV, Yu.A., Professor, redaktor; DEM'YANYUK, F.S., professor, redaktor; ZNAMENSKIY, A.A., inzhener, redaktor; PLAKSIN, I.N., redaktor; RUTOVSKIY, B.N. [deceased] doktor khimicheskikh nauk, professor, redaktor; SHUKHGAL'TER, L. Ya., kandidat tekhnicheskikh nauk, dotsent, redaktor; BRESTINA, B.S., redaktor; ZNAMENSKIY, A.A., redaktor.

(Continued on next card)

ANDREYEV, A.B. (continued) Card 2.

YAKOVLEV, A.V.; ANDREYEV, Ye.S., retsenzent, redaktor; BERKEN-
QETM, B.M., retsenzent, redaktor; BERMAN, L.D., retsenzent, redaktor;
BOLTINSKIY, V.N., retsenzent, redaktor; BONCH-BRUYEVICH, V.L.,
retsenzent, redaktor; VELLER, M.A., retsenzent, redaktor; VINOGRADOV,
A.V., retsenzent, redaktor; GUDTSOV, N.T., retsenzent, redaktor;
DEGTYAREV, I.L., retsenzent, redaktor; DEM'YANYUK, F.S., retsenzent;
redaktor; DOBROSMYSLOV, I.N., retsenzent, redaktor; YELANCHIK, G.M.
retsenzent, redaktor; ZHEMOCHKIN, D.N., retsenzent, redaktor;
SHURAVCHENKO, A.N., retsenzent, redaktor; ZLODYEYEV, G.A., retsenzent,
redaktor; KAPLUNOV, R.P., retsenzent, redaktor; KUSAKOV, M.M.,
retsenzent, redaktor; LEVINSON, L.Ye., [deceased] retsenzent, redaktor;
MALOV, N.N., retsenzent, redaktor; MARKUS, V.A. retsenzent, redaktor;
METELITSYN, I.I., retsenzent, redaktor; MIKHAYLOV, S.M., retsenzent;
redaktor; OLIVETSKIY, B.A., retsenzent, redaktor; PAVLOV, B.A.,
retsenzent, redaktor; PANYUKOV, N.P., retsenzent, redaktor; PLAKSIN,
I.N., retsenzent, redaktor; RAKOV, K.A. retsenzent, redaktor;
RZHAVINSKIY, V.V., retsenzent, redaktor; RINBERG, A.M., retsenzent;
redaktor; ROGOVIN, N. Ye., retsenzent, redaktor; RUDENKO, K.G.,
retsenzent, redaktor; RUTOVSKIY, B.N., [deceased] retsenzent,
redaktor; RYZHOV, P.A., retsenzent, redaktor; SANDOMIRSKIY, V.B.,
retsenzent, redaktor; SKRAMTAYEV, B.G., retsenzent, redaktor;
SOKOV, V.S., retsenzent, redaktor; SOKOLOV, N.S., retsenzent,
redaktor; SPIVAKOVSKIY, A.O., retsenzent, redaktor; STRAMENTOV, A.Ye.,
retsenzent, redaktor; STRELETSKIY, N.S., retsenzent, redaktor;

(Continued on next card)

CRIMBERG, B. V.

ANDREYEV, A.B.; ANTONOV, A.I.; ARAPOV, P.P.; BARMASH, A.I.; BEDNYAKOVA,
 A.B.; BENIN, G.S.; BERESNEVICH, V.V.; BERNSHTEYN, S.A.; BITYUTSKOV,
 V.I.; BLYUMENBERG, V.V.; BONCH-BRUYEVICH, M.D.; BORMOTOV, A.D.;
 BULGAKOV, N.I.; VEKSLER, B.A.; GAVRILENKO, I.V.; GENDLER, Ye.S.,
 [deceased]; GERLIVANOV, N.A., [deceased]; GIBSHMAN, Ye.Ye.;
 GOLDOVSKIY, Ye.M.; GORBUNOV, P.P.; GORYALOV, F.A.; GRINBERG, B.G.;
 GRYUNER, V.S.; DANOVSKIY, N.F.; DZEVUL'SKIY, V.M., [deceased];
 DREMAYLO, P.G.; DYBETS, S.G.; D'YACHENKO, P.F.; DYURNBAUM, N.S.,
 [deceased]; YEGORCHENKO, B.F., [deceased]; YEL'YASHKEVICH, S.A.;
 ZHEREBOV, L.P.; ZAVEL'SKIY, A.S.; ZAVEL'SKIY, F.S.; IVANOVSKIY,
 S.R.; ITKIN, I.M.; KAZHDAN, A.Ya.; KAZHINSKIY, B.B.; KAPLINSKIY, S.V.;
 KASATKIN, F.S.; KATSAUROV, I.N.; KITAYGORODSKIY, I.I.; KOLESNIKOV,
 I.F.; KOLOSOV, V.A.; KOMAROV, N.S.; KOTOV, B.I.; LINDE, V.V.;
 LEBEDEV, H.V.; LEVITSKIY, N.I.; LOKSHIN, Ya.Yu.; LUTTSAU, V.K.;
 MANNERBERGER, A.A.; MIKHAYLOV, V.A.; MIKHAYLOV, N.M.; MURAV'YEV, I.M.;
 NYDEL'MAN, G.R.; PAVLYSHKOV, L.S.; POLUYANOV, V.A.; POLYAKOV, Ye.S.;
 POPOV, V.V.; POPOV, N.I.; RAKHLIN, I.Ye.; RZHEVSKIY, V.V.; ROZENBERG,
 G.V.; ROZENTRETER, B.A.; ROKOTYAN, Ye.S.; RUKAVISHNIKOV, V.I.;
 RUTOVSKIY, B.N., [deceased]; RYVKIN, P.M.; SMIRNOV, A.P.; STEPANOV, G.Yu.,
 STEPANOV, Yu.A.; TARASOV, L.Ya.; TOKAREV, L.I.; USPASSKIY, P.P.;
 FEDOROV, A.V.; FERRE, N.R.; FRENKEL', N.Z.; KHEYFETS, S.Ya.; KHLOPIN,
 M.I.; KHODOT, V.V.; SHAMSHUR, V.I.; SHAPIRO, A.Ye.; SHATSOV, N.I.;
 SHISHKINA, N.N.; SHOR, E.R.; SHPICHENETSKIY, Ye.S.; SHPRINK, B.E.;
 SHTERLING, S.Z.; SHUTYY, L.R.; SHUKHGAL'TER, L. Ya.; KRVAYS, A.V.;

(Continued on next card)

3415 GRINBERG B. G.

Rukovodstvo k. laboratornym zanyatiyam Po tekhnologii Metallov. R.
svyaz' izdat 1954 203m (m-vo svyazi SSSR. vsesoyuz. zauch yelektrotekhn
in-T svyazi, Bespl. CH.2 43s.s. 111; 21. chert 1.0 1 eka 85k (54-57344)
621.7/9 (076.5) (071.4)

GRINBERG, B.G.; RUBTSOV, N.N., professor, doktor tekhnicheskikh nauk, laureat
Stalinskoy premii, zasluzhennyy deyatel' nauki i tekhniki, retsenzent;
RAKOV, V.M., kandidat tekhnicheskikh nauk, dotsent, retsenzent; SHESTO-
PAL, V.M., kandidat tekhnicheskikh nauk, dotsent, retsenzent; YUDIN,
S.T., nauchnyy redaktor; RZHAVINSKIY, V.V., redaktor; RAKOV, S.I.,
tekhnicheskiy redaktor.

[Fundamentals of metal casting] Osnovy liteinogo proizvodstva. Moskva,
Vses.uchebno-pedagog. izd-vo Trudrezervizdat, 1953. 263 p. [Microfilm]
(Founding) (MLRA 7:10)

B

Introduction of Modified Cast Iron in Peat-Industry Machinery. (In Russian.) B. G. Grinberg. *Tekhnicheskaya Promyshlennost' (Peat Industry)*, v. 27, Apr. 1950, p. 23-25.

Recommends modification of cast iron for construction of peat machines as the most economical and practical method of obtaining high-strength cast-iron parts. Method of modification is described in detail. Physical properties of the material are tabulated.

ASTM SLA METALLURGICAL LITERATURE CLASSIFICATION

SELECTED ONE

SELECTED ONE

GRINBERG, B. G.

② 4.
 The intensification of cupola smelting processes. B. G. Grinberg (Moscow Textile Inst.). *Tekhnicheskaya Prom.* 27, No. 12, 18-20 (1950).—A comparison of cupola operations with 1 and with 3 levels of tuyères proves that 20% reduction of fuel consumption and 25-30% increase in capacity results with the same blast pressure when the second arrangement is used. Further intensification of operations can be brought about by preheating the blast and by enriching it with O_2 . With an O_2 consumption of 10-12 cu. m./ton of cast iron, the cupola capacity was increased 50%, the coke consumption reduced 20-25%, and the S in the cast iron reduced by 50%. The temp. and fluidity of the melt were much improved.
 W. M. Sternberg...

PAPIR-ES NYOMDATECHNIKA -- PAPER AND PRINTING
Vol. 2 -- 1950
No. 9, Sept.

Y. V. Moskatov, B. G. Gorbunov, and M. A. Shvach 6818154

The use of high frequency currents in the production of printers type alloys.

(Translated from the Russian)

ASU SLA METALLURGICAL LITERATURE CLASSIFICATION

CA

9

The utilization of peat coke in cupola furnaces A. V.
Masnyukov and B. G. Gumborg *Iskoveniye* 24,
No. 8, 21-5 (1947). A discussion of peat coke for the
manuf. of cast iron Marshall Sittig

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000616900052-6

GRINBERG,

4275. IRON SMELTING IN CUPOLA FURNACE WITH NAT. Torfyanyukov,
A. V. and Grinberg. (Torfyanyaya Promyshlennost' (Peat Industry),
1947, No. 2, 27-30).

68

9

ER

The use of cast iron in chemical industry. B. Guplars and P. Bidulya. *J. Chem. Ind. U. S. S. R.* 15, No. 8, p. 1210-1981. Review H. M. Leicester

ASM A6.1 METALLURGICAL LITERATURE CLASSIFICATION

L 28011-66 EWT(m)/EWA(d)/T/EWP(t)/ETI IJP(c) JD

ACC NR: AP6018166

SOURCE CODE: UR/0126/65/019/002/0182/0190

AUTHOR: Grinberg, B. A.; Plishkin, Yu. M.ORG: Institute of the Physics of Metals, AN SSSR (Institut fiziki metallov AN SSSR)

TITLE: Investigation of segregation of atoms at the antiphase boundary

SOURCE: Fizika metallov i metallovedeniye, v. 19, no. 2, 1965, 182-190

TOPIC TAGS: ordered alloy, asymptotic property, brass, nonstoichiometric compound

ABSTRACT: The antiphase boundary is analysed in an ordered alloy of type β -brass of non-stoichiometric composition. Investigation of the system of equations for equilibrium concentrations and long-range order makes possible the production of some overall results relative to the distribution of concentration in a crystal with an antiphase boundary. Numerical solution of the system produces values of segregation at the antiphase boundary in alloys with various deviations from stoichiometry at various temperatures. It is concluded that at the antiphase boundary in an ordered alloy of non-stoichiometric composition there should be segregation of atoms of the component in excess over stoichiometry. Analytic expressions are obtained which describe the asymptotic behaviour of the concentration and degree of long-range order at great distances from the antiphase boundary. The concentration of the excess component continuously falls off from its maximal value c_1 with increasing distance from the boundary. Orig. art. has: 32 formulas and 1 figure. /JPRS/

SUB CODE: 11, 20 / SUBM DATE: 31Jul64 / ORIG REF: 001 / OTH REF: 003

Card 1/1 *plu*

UDC: 539.2.01

ACCESSION NR: AP4042790

the Stroh method by numerical calculations. In the solution of the system of balance equations, the second and higher powers of the ratios of the widths of the split dislocations to the width of the pair dislocation are neglected. Three types of dislocation reactions, which lead to the formation of firm split dislocation areas, are considered and specific numerical calculations are made for the AuCu₃ alloy. Complex dislocations, which arise upon intersection of paired dislocations, are defined and described, and the possibility of observing them in an electron microscope is discussed. "The author is deeply grateful to A. N. Orlov for continuous interest." Orig. art. has: 4 figures, 1 formula, and 1 table. Report presented by G.V. Kurdyumov.

ASSOCIATION: Institut fiziki metallov Akademii nauk SSSR (Institute of Physics of Metals, Academy of Sciences SSSR)

SUBMITTED: 12Apr63

SUB CODE: MM, SS

NR REF SOV: 002

ENCL: 00

OTHER: 008

Card 2/2

ACCESSION NR: AP4 7

S/0020/64/157/003/0570/0573

AUTHOR: Grinberg, B. A.

TITLE: Some singularities in the dislocation structure of ordered alloys of the type AB_3

SOURCE: AN SSSR. Doklady*, v. 157, no. 3, 1964, 570-573

TOPIC TAGS: ordered alloy, dislocation effect, dislocation net, gold alloy, copper alloy, anisotropic medium

ABSTRACT: The author considers the equilibrium width of paired dislocations and dislocations resulting from reactions in an anisotropic medium. The calculation is based on the anisotropic theory of elasticity, using a method proposed by Stroh (Phil. Mag. v. 3, 625, 1958). Because of mathematical difficulties, the analysis is limited to screw and 60-degree dislocations, although the solutions for dislocations with other orientations can be obtained on the basis of

Card 1/2

L 13404-63

ACCESSION NR: AP3000091

sequently, the balanced width of the vertex dislocation was analyzed, taking the crystallographic splitting into account but limiting the investigation to isotropic elasticity. The influence of the V-shaped dislocations on the width of the vertex dislocations was established. The balanced configuration of a complex dislocation in the sliding plane was studied. It is shown that, depending on the orientation of the dislocation axis with respect to the Buerger vector, a complex dislocation may be either a common sliding dislocation pair or a triple dislocation which can be studied by an electron microscope. In the case of a plane accumulation of n dislocation pairs, the resulting stress is $2n$ times greater than the applied stress. Orig. art. has: 14 formulas, 1 table, and 7 figures.

ASSOCIATION: Institut fiziki metallov AN SSSR (Institute of Physical Metallurgy, Academy of Sciences, USSR)

SUBMITTED: 17Nov62

DATE ACQ: 12Jun63

ENCL: 00

SUB CODE: 00X

NO REF SOV: 001

OTHER: 013

Card 2/2

L 13404-63 EWP(q)/BDS/EWT(1)/EWT(m)/EEC(b)-2 AFFTC/ASD IJP(C)/JB
 ACCESSION NR: AP3000091 S/0126/63/015/004/0486/0496

AUTHOR: Grinberg, B. A.

TITLE: Some structural dislocation characteristics in ordered alloys of type AB
 sub 3

SOURCE: Fizika metallov i metallovedeniye, v. 15, no. 4, 1963, 486-496

TOPIC TAGS: structural dislocation, ordered alloy, sliding plane dislocation,
 balanced dislocation width, vertex dislocation

ABSTRACT: The balanced configurations of various complex dislocations were analyzed. The range of magnitudes expressing the average distance between dislocations was established and the electronic microscope applicability for their study was proved. Formulas for the evaluation of the balanced dislocation width were derived for the complex dislocations formed according to the reactions A, B and C (11a, 10a, and 8 in Hirth notation). The numerical values were obtained for AuCu sub 3. These values and their variations (due to different reactions) were found to be well within the working range of an electron microscope. The calculations based on the anisotropic theory of elasticity were made according to the Stroh method. In order to simplify the calculation, the crystallographic splitting was disregarded. Sub-

Card 1/2

GRINEERG, B.A.

Interaction of an asymmetrical inclined dislocation boundary
with an impurity atom. Fiz. met. i metalloved. 13 no.5:779-782
Mey '62. (MIRA 15:6)

1. Institut fiziki metallov AN SSSR.
(Dislocations in metals)

Strengthening of dislocations...

S/181/62/004/002/032/045
B102/B186

Phys., 31, 687, 1960). Thus, the number of dissolved atoms reaching a dislocation of unit length in unit time is given by $n(t) = \alpha n_0 (AD/kT)^{2/3} t^{2/3}$, where $A = 4\pi b^2 r^3$, $\alpha = 3(\pi/2)^{1/3}$. The strengthening of a first dislocation on approach of a second one is given by $\tau_2(t) + \tau - \tau_0 > f_k/b\bar{l}(t)$, where $\tau_2(t) = \mu b/2\pi(1-\nu)d_2(t)$, the stress acting on the first dislocation from the second one, $d_2(t)$ is the distance of the two dislocations, $\tau - \tau_0 = f_k/b\bar{l}_0$ indicates the position of equilibrium of the first dislocation; τ is the external stress and τ_0 is the stress originating in the zero dislocation; $\bar{l}_0 = b/c$, b is the Burgers vector, and c the impurity atom concentration, f_k is the attractive force acting between dislocation and impurity atom. A numerical estimate is given for a special case. There is 1 figure.

ASSOCIATION: Institut fiziki metallov AN SSSR Sverdlovsk (Institute of Physics of Metals AS USSR, Sverdlovsk)

SUBMITTED: February 8, 1962 (initially) May 30, 1962 (after revision)

Card 2/2

3/101/62/004/002/032/045
B102/B106

AUTHOR: Grinberg, B. A.

TITLE: Strengthening of dislocations in accumulations

PERIODICAL: Fizika tverdogo tela, v. 4, no. 9, 1962, 2593 - 2596

TEXT: The strengthening of dislocations by impurity atoms during the formation of accumulations is studied, the migration of the impurity atoms toward the dislocations being taken into account. The accumulation is assumed to be formed by dislocations from a Frank-Read source. During their propagation in the slide plane these dislocations strike an obstacle on which they accumulate; under the action of the permanently growing stress field of approaching dislocations it is assumed that the interaction between dislocations and impurity atoms is elastic, and that the distribution of the impurity atoms along a dislocation is uniform. Various estimates are made of some quantities which characterize the dislocation strengthening, based on theoretical studies by J. S. Koehler (Imperfections in nearly perfect crystals. N. Y., p.197, 1952; A. Granato, K. Lucke. J. Appl. Phys., 27, 789, 1956; J. J. Gilman, W. G. Johnston. J. Appl.

Card 1/2

GRINEBERG, B.A.; ORLOV, A.N.

Microscopic calculation of the spacing of atoms in a dislocation. Fiz.
met. i metalloved. 11 no. 4:481-488 Ap '61. (MIRA 14:5)

1. Institut fiziki metallov AN SSSR.
(Dislocations in metals) (Metallography)

YERMELOVA, G.G.; KURATV, A.Ye.; LEVIN, P.Y.; ARBUZOVA, L.N.; GRYNBERG,
A.Ye.; FREIDMAN, T.A.

Effectiveness of some stabilizers in the extrusion of polypropylene
films and their aging. Plast. massy no.3-46. 1965.
(MIRA 1846)

GUTMAN, V.P.; GUTMAN, I.Y.; GUTMAN, A. V. (Minsk); GUTMAN, Z. I.;
GUTMAN, I.Y.; GUTMAN, I.Y.; GUTMAN, I.Y.; GUTMAN, I.Y.; GUTMAN, I.Y.;
GUTMAN, I.Y.; GUTMAN, I.Y.; GUTMAN, I.Y.; GUTMAN, I.Y.; GUTMAN, I.Y.;

Receiving the work of the... operating in a hydraulic
abrasive medium. 0-1 20 00.00-03 0 00. (MIA 17/10)

1. Venerability...
Institut...
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ACCESSION NR: APL009156

ASSOCIATION: Nauchno-issledovatel'skiy institut rezinovy*kh i lateksny*kh izdeliy
(Scientific Research Institute of Rubber and Latex Products); Fiziko-khimicheskiy
institut im. L. Ya. Karpova (Physical and Chemical Institute)

SUBMITTED: 22Aug62

DATE ACQ: 10Feb64

ENCL: 00

SUB CODE: CH

NO REF SOV: 005

OTHER: 001

Card 3/3

ACCESSION NR: AP4009156

solvents (at 55C). Since polar solvents did not accelerate the reaction, its homolytic character was stressed. In order to find out whether the reaction proceeded via exchange of sulfur atoms or via RS groups, the same thiobenzoic acid derivatives were reacted with a solution of elementary radioactive sulfur in toluene, which showed that the reaction with DBDS proceeded only at 125C and at a very slow rate (amounting to only 10% within 2 hours). The next experiment was intended to prove the mobility of the thiobenzoyl radical. The thiobenzoic acid derivatives were reacted with a solution of diphenylpicrylhydrazyl (DPH) in benzene at 20-22C, the optical density of DPH being checked at a wave length of 520 m μ by means of a SF-4 spectrophotometer. The results showed that the activity of the various derivatives of thiobenzoic acid varied greatly, depending on their composition and the structure of R. Parallel experiments were conducted with natural rubber, which was plasticized at 80-90C for 7 minutes on rolls in the presence of 10⁻² Mol RS/kg of rubber, the resulting plasticity being determined in Muni's viscosity units at 100C. This supports the view that the activity of the particular plasticizer is directly related to the ease of radical breakup, as established by the reaction with DPH. Since Zn-thiobenzoate proved to be the most effective plasticizer, a number of Zn-mercaptides were tested for their plasticization activity towards rubber and their reactivity with DPH, which confirmed their close correlation. Orig. art. has: 2 charts and 1 table.

Card 2/3

ACCESSION NR: AP4009156

S/0190/64/006/001/0112/0117

AUTHORS: Prashchikina, A. S.; Gur'yanova, Ye. N.; Grinberg, A. Ye.

TITLE: The radical nature of breakup of a series of rubber plasticization organo-sulfur accelerators

SOURCE: Vy*sokomolekulyarny*ye soyedineniya, v. 6, no. 1, 1964, 112-117

TOPIC TAGS: rubber, rubber plasticization, accelerator, organo sulfur accelerator, dibenzoyldisulfide, dibenzoylsulfide, diphenylpicrylhydrazyl, accelerator breakup, radical, radical breakup, mobile group

ABSTRACT: The plasticizing effect of derivatives of thiobenzoic acid was investigated to discover tendencies toward radical reactions and whether a breakup into radicals was essential for their performance. The exchangeability of RH groups was studied, using dibenzoyldisulfide (DBDS), tagged with the S^{35} isotope, as the standard. Its interaction with dibenzoylsulfide, Zn-thiobenzoate, Ni-thiobenzoate, benzylthiobenzoate, and bis-thiobenzoatebenzilidene was studied, using equimolar ratios of 0.15 Mol/l solutions in toluene, at temperatures up to 140°C for 30 minutes. It was found that these accelerators readily enter into reactions. The experiment was repeated, using ethanol, acetone, isopropylbenzene, toluene, and benzene as

Card 1/3

GRINBERG, A.Ye.; FRISHMAN, T.A.; PESCHANSKAYA, R.Ya.; KRYUKOVA, A.B.;
KRYLOVA, V.N.

Vulcanizing action of some derivatives of dithiocarbamic acid.
Kauch. i rez. 22 no.8:32-35 Ag '63. (MIRA 16:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy konstruktorsko-tekhnologicheskiy institut asbestovykh tekhnicheskikh izdeliy.

PRASHCHIKINA, A.S.; GRINBERG, A.Ye.; MAKAROVA, I.M.

Dependence between the chemical structure of some sulfur-containing compounds and their activity as accelerators of natural rubber plasticization. Vysokom.soed. 5 no.11:1641-1644 N '63.
(MIRA 17:1)

1. Nauchno-issledovatel'skiy institut rezinovykh i lateksnykh izdeliy.

L 13664-63
ACCESSION NR: AP3001430

was reached at only 110-120C. The authors also studied the effect of dibenzoylsulfide on the process of subvulcanization in the presence of inhibitors of the latter, such as trichloromelamine, phthalic anhydride, and salicylic acid, finding a marked delaying effect on the subvulcanization process. Orig. art. has: 2 charts and 2 tables.

ASSOCIATION: Nauchno-issledovatel'skiy institut rezinovy*kh i lateksny*ky izdelyi (Scientific Research Institute of Rubber and Latex Goods)

SUBMITTED: 00

DATE ACQ: 30May63

ENCL: 00

SUB CODE: 00

NO REF SOV: 002

OTHER: 000

Card 2/2

L 13664-63

EWf(j)/EWT(m)/BDS AFFTC/ASD Pc-4 RM/WW

ACCESSION NR: AP3001430

S/0138/63/000/004/0023/0024

AUTHOR: Prashchikina, A. S.; Grinberg, A. Ye.; Makeyeva, A. R.

TITLE: The effect of dibenzoylsulfide on the subvulcanization tendency on the basis of natural rubber

SOURCE: Kauchuk i rezina, no. 4, 1963, 23-24

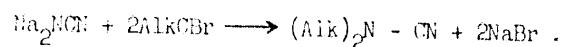
TOPIC TAGS: accelerators of plasticizing, vulcanization, subvulcanization, dibenzoylsulfide, thiuram, zinc oxide

ABSTRACT: In view of the marked accelerating effect of dibenzoylsulfide on the plasticizing of natural rubber, the authors felt it worth while to investigate its effect on a standard natural rubber mixture in the presence of accelerators of vulcanization, such as Altax, Captax, DFG, thiuram, and Santocure. It was found that dibenzoylsulfide exerted an enhancing effect on subvulcanization at 90-100C in the presence of Captax and thiuram, that this effect increased with higher concentrations of dibenzoylsulfide, and that the resulting product became insoluble in benzene. With Altax or Santocure the state of insolubility

Card 1/2

Effect of dialkylcyanamides on the

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A051/A126



A 45 - 50% yield was obtained. The ionic deposit method was used to prepare films of the synthesized compound. Experiments showed that the dibutyl-diamyl and the dioctylcyanamide n-structure reduce the friability temperature to -60 to -67°C, whereas the dialkylcyanamides of the iso-structure are less effective. The dibutylcyanamide reduces the strength of the films to a lesser extent than does the dibutylsebacinate. There are two tables.

ASSOCIATION: Nauchno-issledovatel'skiy institut rezinovykh i lateksnykh izdeliy
(Scientific Research Institute of Rubber and Latex Articles)

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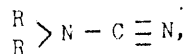
S/138/62/000/011/005/008
A051/A126

AUTHORS: Makarova, I.M., Vol'chenko, R.L., Grinberg, A.Ye., Trofimovich,
D.P.

TITLE: Effect of dialkylcyanamides on the friability temperature of chloroprene latex films

PERIODICAL: Kauchuk i rezina, no. 11, 1962, 22 - 23

TEXT: An attempt was made to find a new masticator for chloroprene latex films, which would reduce to a greater degree the friability temperature, and to a lesser degree the tensile properties of the articles. The most effective synthesized masticator was found to be the dialkylcyanamide compound:



where R are the alkyls with various numbers of carbon atoms. The Vliet method was used for synthesizing the latter from alkyl halide and sodium cyanamide. The reaction is expressed by the following equation:

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A051/A126

Derivatives of thiobenzoic acid-accelerators of...

other hand, shows an increase in masticating action with an increase in the concentration of the product to 3 w.p. When using the investigated accelerators, the minimum destruction rate of the rubber occurs at 70°C, whereby, the temperature change, within the range of 50 - 100°C, has no significant effect on the NR mastication, as opposed to the effect observed without accelerators. The masticating action of dibenzoyldisulfide increases with temperature increase. Thus, the former is considered to be useful in industry as an accelerator of NR high-temperature mastication. It was noted that the introduction of the thiobenzoic acid salts and DBS into non-filled mixes, prepared according to the replacement method with thiuron and captax, have an elevated tendency to scorching. It is suggested that the scorching tendency be reduced or completely eliminated by separate preparation of the NR masticates, introducing softeners, fillers and especially scorching inhibitors. The most effective scorching inhibitor is thought to be trichloromelamine. The rate of vulcanization and the physico-mechanical properties of the vulcanizates are not affected by the presence of thiobenzoic salts and DBS. The latter is found to be equal to peptone 22 in its masticating action and is easier to produce. There are 5 figures and 1 table.

TRANSLATION: Nauchno-Issledovatel'skiy Institut rezinovykh i lateksnykh izdeliy
(Scientific Research Institute of Rubber and Latex Articles)

used 2/2

S/138/62/000/008/006/007
A051/A126

AUTHORS: Prashchikina, A. S., Grinberg, A. Ye., Makeyeva, A. R., Makarova, I.M.

TITLE: Derivatives of thiobenzoic acid-accelerators of NR mastication

PERIODICAL: Kauchuk i rezina, no. 8, 1962, 17 - 19

TEXT: A study was made of the masticating effect of various thiobenzoic acid derivatives, including dibenzoyldisulfide (DBS) and the cadmium, nickel and lead salts of thiobenzoic acid. Their action was compared to the mastication accelerators renacite IV and peptone 22. The thiobenzoic acid salts were produced similarly to the synthesis of the zinc salt of thiobenzoic acid. All of the investigated salts were shown to accelerate the NR mastication, whereby, with an increase in the concentration of the product, the type of metal included in the salt composition affects the degree of the accelerating action and the nature of the rubber mastication change. The optimum dosage of the salts was found to be about 0.3 w.p. to 100 w.p. of rubber. The cadmium, nickel, zinc salts and renacite IV, when used in optimum quantities, are equivalent to one another and supercede the lead salt in their masticating action of the NR. Dibenzoyldisulfide, on the

Card 1/2

Protection of rubber....

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HCM and DCM safely protect the mixture from scorching at 110°C, over a period of 40 min, and do not affect the vulcanization rate, nor the physico-mechanical properties of the vulcanizate. Chloramine B was found to be the least effective scorching inhibitor. The most effective scorching inhibitors of CHC-30 (SKS-30)-based rubber mixes were found to be the tri- and hexachloromelamine compounds. There are 2 figures and 2 tables.

ASSOCIATION: Nauchno-issledovatel'skiy institut rezinovykh i lateksnykh izdeliy
(Scientific Research Institute of Rubber and Latex Articles)

Card 2/2

S/138/62/000/006/003/008
A051/A126

AUTHORS: Grinberg, A.Ye., Chertkova, V.F., Potashnik, A.A.

TITLE: Protection of rubber mixes against scorching with organic chlor-
-containing compounds

PERIODICAL: Kauchuk i rezina, no. 6, 1962, 9 - 11

TEXT: Well-known and unknown chlor-containing compounds as inhibitors of scorching were studied: dichloromelamine (DChM), trichloromelamine (TChM), hexachloromelamine (HChM), cyanur chloride (CCh), trichlorocyanuric acid (TChCA), sodium salt of dichlorocyanuric acid, (Na-DChCA), N,N'-dichloro-bis(2,4,6-trichlorophenyl)-urea (Chloramine), dichlorobenzosulfamide (chloramine B). The effectiveness of the chlor-containing compounds as inhibitors of scorching was found to depend on their chemical structure, on the distribution of the chlorine atoms in the molecule, and not on the number of chlorine atoms, nor their percentage content in the molecule. TChM, TChCA, CCh and Na-DChCA were shown to be considerably active inhibitors. The first two compounds, however, sharply inhibit vulcanization and cause a drop in the physico-mechanical properties. Chloramine,

Card 1/2

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A051/A129

Furfurhydramide and its vulcanization activity

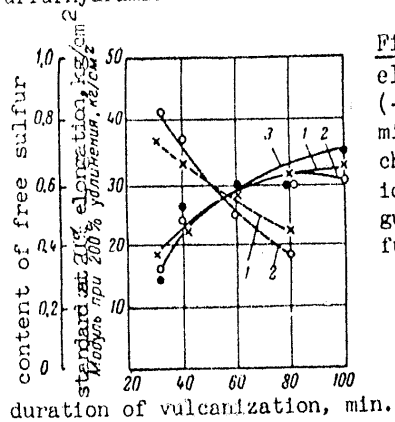


Figure 3: Relationship of the module at 200% elongation (—) and the content of free sulfur (-----) to the duration of vulcanization of the mixtures based on SKS-30 ARM containing gaseous channel carbon black: 1 - 2 w.p. of furfurhydramide and 0.5 w.p. of altax; 2 - 0.3 w.p. diphenylguanidine and 1.5 w.p. of altax; 3 - 0.6 w.p. of furfurhydramide and 1.5 w.p. of altax.

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A051/A129

Furfurhydramide and its vulcanization activity

Figure 1: Effect of furfurhydramide on

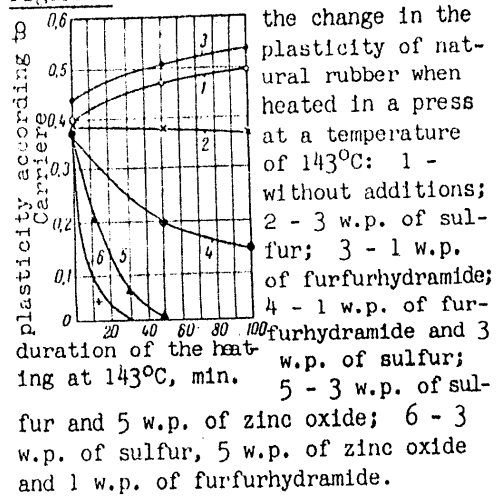
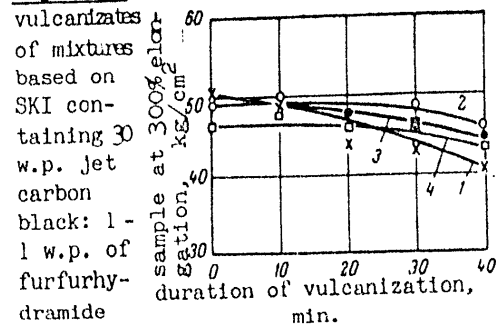


Figure 2: Module at 300% elongation of vulcanizates of mixtures based on SKI containing 30 w.p. Jet carbon black: 1 - 1 w.p. of furfurhydramide and 0.25 w.p. of thiuram; 2 - 2 w.p. of furfurhydramide and 0.25 w.p. of captax; 3 - 2 w.p. of furfurhydramide and 0.25 w.p. of altax; 4 - 2 w.p. of altax (standard mixture sample).



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A051/A122

Furfurhydramide and its vulcanization activity

Commercial furfurhydramide melts at 110 - 115°C. Its nitrogen content is 10.41% calculated and 10.20 - 10.30% found. Obtained data showed that when natural rubber is heated in the presence of furfurhydramide and sulfur, there is a significant decrease of the plasticity, whereas the plasticity of natural rubber containing only sulfur or furfurhydramide hardly changes at all when heated under the same conditions. It is concluded that furfurhydramide strengthens the structuralizing effect of sulfur. It does not affect the inclination of the mixtures to scorching. There are 3 tables, 4 figures and 8 references: 2 Soviet, 4 English and 2 German.

ASSOCIATION: Nauchno-issledovatel'skiy institut resinovych i lateksnykh izdeliy
(Scientific Research Institute of Rubber and Latex Articles)

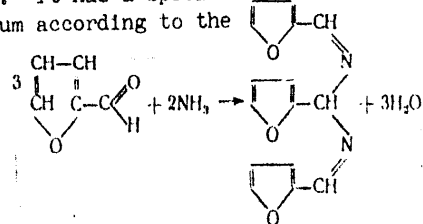
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A051/A129

Furfurhydramide and its vulcanization activity

vulcanizates in repeated deformations. When it is used in combination with captax, altax or thiuram in mixtures based on natural and a number of synthetic rubbers, the rate of vulcanization does not change and vulcanizates are obtained with satisfactory technical properties. Its use extends the assortment of vulcanization accelerators and decreases the consumption of captax, altax, diphenylguanidine and thiuram. Its physical and chemical characteristics are: finely crystalline powder of straw-yellow color with d_4^{20} 1.15 - 1.16, melting point when crystallized from ethyl ether 117 - 118°C. It is easily soluble in methyl, ethyl and isopropyl alcohol, acetone, ether, benzene, but is insoluble in water. The molecular heat of combustion at P = const. is 1,828.15 cal, at V = const. it is 1,827.87 cal. Acids decompose it to furfurole and ammonium, when boiled in diluted alkali it is converted to the isomer base furfurin. It absorbs ultraviolet rays, whereby its color changes to a dark brown. It has a specific furfurole odor. It is produced from furfurole and ammonium according to the equation:



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A051/A129

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AUTHORS: Grinberg, A.Ye.; Tsvetkov, A.I.; Yal'tseva, Ye.P.; Makeyeva, A.R.;
Peschanskaya R.Ya.; Prashchikina, N.P.; Prashchikina, A.S.; Kryu-
kova, A.B.

TITLE: Furfurhydramide and its vulcanization activity

PERIODICAL: Kauchuk i rezina, no. 2, 1961, 25 - 29

TEXT: The Soviet rubber industry uses diphenylguanidine as a nitrogen-con-
taining accelerator with a basic nature. Its production is based on toxic and
inflammable materials (aniline, carbon sulfide, lead silicagels and isopropyl al-
cohol). An attempt was made to find a cheaper nitrogen-containing organic base.
Furfurhydramide was tested in combination with sulfur accelerators as an acceler-
ator of vulcanization. A method for producing the furfurhydramide from cheap and
accessible raw material was developed. It is an nitrogen-containing organic base
which can be used as a vulcanization accelerator in combination with altax, captax
or thiuram. In mixtures based on natural rubber and a series of synthetic rubbers
containing diphenylguanidine in combination with altax or captax, furfurhydramide
can be used instead of diphenylguanidine. It increases the durability of the

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83296

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WEL/KMZ

The Synthesis and the Investigation of Rubber Mastication Accelerators

and simply to obtain than Renacite IV and Peptone 22. Dibenzoylsulfide has also a higher activity. Other chemical properties of the latter compound are listed (Ref. 6). The synthesis of dibenzoylsulfide for this study is outlined and the obtained product described in detail. Thiobenzoate was obtained from sodium thiobenzoate and zinc sulfate by means of a mutual exchange of the salts in an aqueous solution (Formula 1). The laboratory procedure is explained (Formulae 2, 3 and 4), and the experimental results discussed. It was seen that dibenzoylsulfide as a mastication accelerator of natural rubber, on the rollers and in the rubber mixer, surpasses Renacite IV, Peptone 22 and zinc thiobenzoate. It also accelerates the thermomastication of SKS-30 and SKN-26. Zinc thiobenzoate as an accelerator of mastication of natural rubber is equivalent to Renacite IV and Peptone 22. Dibenzoylsulfide and zinc thiobenzoate just as Renacite IV and Peptone 22 have no effect on the properties of raw mixtures and on the physico-mechanical properties of the vulcanizates. Mass production of dibenzoylsulfide and zinc thiobenzoate should be started, since they are simple to manufacture and have a high activity as accelerators of rubber mastication. There are 8 graphs, 4 tables and 6 references. 4 Soviet and 2 German

ASSOCIATION: Nauchno-issledovatel'skiy institut rezinovykh i lateksnykh izdeliy
(Scientific Research Institute of Rubber and Latex Products)

Card 2/2

83296

S/133/59/000/010/008/010
A051/A029

15 9136

AUTHORS: Grinberg, A.Ye.; Tsvetkov, A.I.; Makeyeva, A.R.; Prashchikina,
A.S.; Levitin, I.A.; Shapiro, A.L.; Mamayeva, I.A.TITLE: The Synthesis and the Investigation of Rubber Mastication Accelerators
pb

PERIODICAL: Kauchuk i Rezina, 1959, No 10, pp. 35 - 39

TEXT. Numerous articles have been published on the subject of accelerating the mastication process both of natural and synthetic rubbers by using various organic compounds, such as mercaptanes, amines, nitro-compounds, nitroso-compounds, guanidines, etc. The present article deals with the different methods of obtaining them and the results of a comparative study of the action of dibenzoylsulfide and zinc thiobenzoate, which were the first substances to be recommended by the authors as accelerators (Ref. 4) in the mastication process in natural and synthetic [CRC-30 (SKS-30), CKH-26 (SKN-26)] rubbers. The effect of these two accelerators on the properties of the mixtures and vulcanizates were compared to Renacite IV and Peptone 22, two mastication accelerators used extensively in other countries. Dibenzoylsulfide and thiobenzoate are non-toxic and are more easily

Card 1/2

GRINBERG, A.Ye.; CHERTKOVA, V.F.; SMOLYANITSKIY, V.Z.; MAKEYEVA, A.R.;
RUMYANTSEVA, N.P.

Using benzoates to protect rubber mixtures from scorching; report
no.1. Kauch. i rez. 18 no.1:22-27 Ja '59. (MIRA 12:1)

1. Nauchno-issledovatel'skiy institut rezinovykh i lateksnykh
izdeliy.
(Vulcanization) (Benzoic acid)

~~APPROVED FOR RELEASE - 06/23/11 - CIA-RDP86-00513R000616900052-6~~

GRIFFITHS, A. V., JR., and J. W. WILSON, JR. 1970. p. 17-21.

Turning information to the subject of the investigation, the following information was obtained from the Bureau of the Census, Washington, D.C., 20540:

ZAK, P.S.; ZHURAVLEV, V.L.; ROMANOV, V.A., otv.red.; SADOMOV, N.T.,
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red.; KOGAN, A.M., red.; KRUGLIKOV, A.V., red.; REBGUN, K.K.,
red.; NAZIMOV, N.M., red.; NYMARK, A.M., red.; NOTYAKHOV, M.A.,
red.; SPEVAK, V.Ya., red.; TENENBAUM, M.M., red.; SHNEYDER, E.I.,
red.; ALADOVA, Ye.I., tekhn.red.; SHKLYAR, S.Ya., tekhn.red.

[Design and manufacture of globoid gears] Proektirovanie i
izgotovlenie globoidnykh peredach. Moskva, Ugletekhizdat, 1958.
87 p. (Tekhnologiya ugol'nogo mashinostroeniia, no.2).
(MIRA 13:2)

(Gearing)